1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

continued decline cannot be laid at its door. Japanese cultured pearls first started to appear on the market in quantities in the twenties just before the depression. As time has gone on the competition they offered has tended to become less and less, but on the other hand, the world demand for this gem has reached an all-time low, mainly because of the effect of the cultured pearl.

The introduction of cultured pearls and artificial pearls alike has had far-reaching effects on the natural pearl market. While they do not compete insofar as price is concerned when they are recognized as cultured, it takes an expert to distinguish them. Thus, the net effect of cultured pearls, and even more so of the expertly fabricated synthetic pearls, has been to cheapen the pearl as a precious gem in the eyes of those who wear them. There are actually some women who prefer cultured pearls, which are usually more uniform. As a result, natural Gulf pearls do not bring a tenth of what they did a quarter of a century ago at Bahrein.

It is a strange fact that even though a cultured pearl is worth only a few percent of the value of real pearls, there are few pearl merchants in the Persian Gulf who can tell a good cultured pearl from the Gulf pearl without destroying the two in the effort.[8] Radiography (x-ray), x-ray diffraction, fluorescence under x-ray radiation, or specific gravity determinations, alone or in various combinations, may be used to detect cultured pearls, but these physical tests are not used by the Arabs for obvious reasons.

One might ask why cultured pearls have not been "introduced" into the Persian Gulf pearl market by divers, captains, or merchants. The Arab will tell you that this is improbable. The importation of cultured pearls into the Persian Gulf is prohibited, and in fact carries a severe penalty. The oysters are opened in sight of the divers, so they all know how many exceptional pearls the *nakhoda* (captain) receives and thus what exceptional pearls

[8] One of the world's leading authorities on the differentiation of cultured and natural pearls by their physical properties, Dr. A. E. Alexander, visited the Persian Gulf in 1947 to study the pearl fisheries and took with him a number of fine cultured pearls which he showed to a group of about thirty Bahrein pearl dealers. These Arabs had never seen a cultured pearl, whose importation is normally prohibited, and were astounded at its quality.

1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

the owner in turn receives. Such fraud as the introduction of cultured pearls, if detected, would bring out the headman's ax, for Arab laws are severe in this respect. But as there are always people willing to make a dishonest dollar or rupee—and the Arabs are certainly no exception—it is inconceivable that cultured pearls, carefully chosen for their similarity to Gulf pearls, have not at times been smuggled into the Persian Gulf. If the Arab merchants cannot detect them, there are probably few experts who could without the aid of delicate and elaborate electrical instruments.

OYSTERS AND OYSTER BEDS

Arab lore in the Gulf relates that the young shell-less oysters come to the surface when it is raining, or when the moon is full. The raindrop is the father of a good pearl and the oyster the mother, while the moon produces luster. A poor season is attributed by many to a shortage of rain. Al-Qazwini, author of *The Wonders of Creation,* gives a different version: the north wind carries a mist containing a viscid substance similar to mercury from the Caspian Sea to the Gulf; the oysters draw in this substance, a large drop forming a large pearl.[9] But every Arab has his own explanation of the phenomenon, and believes that the true scientific explanation is just fantasy.

According to O'Shea, three types of pearl oysters are found in the Persian Gulf, known to the Arabs as *mahharah, zanniyah,* and *sadaifiyah.* The *mahharah* are the commonest, growing to two or three inches in diameter, and producing 98 percent of the pearls found in the Gulf. The *sadaifiyah* is a rare find and seldom yields pearls; it grows to great size (six to eight inches in diameter) and is often collected for its mother-of-pearl. The *zanniyah* is found in the vicinity of the Ras al-Khaymah in Oman; no details of this oyster are given. In the Red Sea two varieties are commonly found: the large oyster, known as the *balbil,* and the small, known as the *sadaf.* The pearl itself is known as *lulu* to the Arabs in the Persian Gulf, irrespective of the species of oyster from which it comes, while the Persians know it as

[9] A. Rihani, *op. cit.,* p. 277.

1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

DIVING TECHNIQUE

The rights to the Persian Gulf pearl fisheries are jealously guarded by the Arabs, and these rights have been backed up by the British Government for over a hundred years. They are limited to the inhabitants of the Gulf littoral—Arabs and Iranians. Pearl diving in the Persian Gulf is carried on without the use of any professional diving gear; it is "skin diving." The British have prohibited drags, dredges, and compressed air diving suits or helmets, and there is a 30,000 rupee ($9,000) fine for violation of the law.

However, in spite of this protection, foreigners have dived for pearls in the Gulf, and diving equipment has been used. In 1882 a Bombay syndicate sent a steamer, the *Johnstone Castle,* without official permission to the Bahrein banks. After five days the vessel was arrested by a British gunboat; its yield had been only 23 seed pearls.[21] During the pearling season of 1935 some Italians employed by the Qusaibi Brothers, wealthy merchants of Hofuf, Saudi Arabia, used deep-sea diving suits.[22] Presumably these merchants figured themselves exempt from British proclamations, inasmuch as they were Arabian nationals. But nothing more was ever heard of the venture, so it was either not a financial success or else the British brought pressure to bear against the practice. The Arab customs officials of both Saudi Arabia and Bahrein Island have been extremely suspicious of oil company divers, who spend a lot of time under water inspecting pipelines and piers, and they used to watch them through field glasses to see that they never brought up any oysters.

The maximum depth at which the divers work is about 12 fathoms.[23] Sweeps are left projecting overboard athwartships and are lashed to the tholepins and the deck. The divers' lines pass over the sweeps so that they will not become fouled. To get to the bottom a diver puts his foot in a loop of rope tied to a stone or iron weight, releases a slip knot holding the rope to the sweep, and holding onto the rope plummets down. The attendant pulls up the stone as soon as he feels it hit bottom. The diver holds onto

[21] R. O'Shea, *op. cit.*, pp. 140–41.
[22] K. S. Twitchell, *Saudi Arabia* (Princeton, N. J., 1947), p. 26.
[23] A. Villiers, *op. cit.*, p. 374; Hugh Smith, "The Pearl Fisheries of Ceylon," *National Geographic Magazine,* 33 (1912), p. 174; R. O'Shea, *op. cit.*, p. 137.

1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

ECONOMIC RELATIONSHIPS

228 426 Pearling is a great gamble for everyone concerned. A share may be worth only 50 or 100 rupees if the take has been poor, but on the average a share should net at least several hundred rupees. It must be remembered that a share usually represents a year's earning, since the pearling industry operates on the "debt system." This is not to be confused with the "truck system," for the workers in the Persian Gulf pearl fisheries are not paid in produce. In the debt system the divers and tenders get actual cash advances during the seasons they are out of work, and their families get food and supplies while they dive. They must pay off their incurred debts with their earnings after the pearling season, but somehow they never seem able to get free.

228 426 672 Until recently, a diver who accepted cash advances from a *nakhoda* had doomed himself to diving until death, and unfortunately death might not be an exit, as his debt was simply passed on to his son or brother, who then went on to incur his own debt. Once in debt a diver is prohibited from hiring to another *nakhoda*—he must repay his debt to the man who gave him cash advances. A diver or anyone else who accepts an advance in the pearling industry has sold himself to economic slavery, for the *nakhoda* owns his ability to work, while the man must support himself. Thus, a diver is bound to return to the purgatory of pearling at the *nakhoda's* call. Since Muslim law prohibits interest or usury the debt system effectively gets around this. The *nakhoda* is usually in turn bound to some merchant in the same way, for he has taken cash advances to give to his divers and attendants.

567 465 In Oman the *nakhodas* often hire their labor from a tribal agent, giving the agent an advance of money and rice. In the case of slaves, the agent takes this to the slaves' master; at the end of the season he collects the balance of the slaves' earnings. Thus the slaves' earnings go completely to his master, who in return clothes and feeds him.

228 656 426 On Bahrein Island the Bahrein Government has, at the suggestion of the British, effected many reforms in the pearling industry with respect to the debt system. Hereditary debts have been abolished; pearl divers on Bahrein now take their debts to

[illegible] Bowen C-4 (1945-1947) 195. MK2 Maritime Arabs MK2

their graves, and justly, too, for diving probably hastened their end. The Government demands that account books be given each diver and that they be kept up properly, and sends inspectors to see that they are. Before the season begins at Bahrein the amount of cash advances is agreed upon and proclaimed. The divers have put up a terrific objection to this limitation, for it seemed to them that they were simply getting less money. They could not understand that their debt was being lowered—in fact they did not care, for hadn't they always been in debt?

There is a "diving court" which enforces the arbitrary laws of the industry, such as those dealing with engagement of labor, taxes, spurious pearls, etc. The court also disposes of any case of a *nakhoda* who cannot pay off his debts; the *nakhoda* may lose his boat and divers, but not his personal property.

There has never been any noticeable effort on the part of the ruling sheikhs to better the lot of their subjects: if they were unemployed for long periods in the winter they would be sure to work harder during the pearling season to pay off their winter's debts. As the local sheikhs levy a tax on every boat and get a cut of some sort on the proceeds, the pearlers in a sense work for them. The sheikh thus always looked on the lack of other employment with favor, for if a man were happily employed as a farmer, fisherman, or herder there would be little incentive to enter the pearling purgatory. Under normal conditions the divers have an eight months' loaf during which time they live off their *nakhoda;* this is to the liking of both the diver and the *nakhoda.*

However, many divers do find other work, as fishermen or mariners. The depression of the thirties hit the Persian Gulf pearl industry with great suddenness. Within a short period tens of thousands of pearlers in the Gulf found themselves without an occupation. The marine stock of Kuwait rose to the situation and gradually shifted to cargo hauling between Kuwait and Basra, Iran, India, South Arabia, and East Africa. Large ocean-going double-ended dhows have carried the fame of Kuwait seamanship throughout the Middle East, sailing to Africa on one monsoon and back on another. Kuwait oil operations have been drawing on this labor supply as well, so that nowadays the

2: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

278 656 672 426 On Bahrein and in Kuweit the governments have made reforms in the pearling industry. On Bahrein a pearl diver's debts now die with him; in other places a diver's debts are passed on to his son or brother. The Bahrein government also demands that account books be kept for each diver, and the cash advances are agreed upon at the beginning of the season.

228 However, there has been a drastic change in the Persian Gulf pearling industry. The great depression after World War I and the competition from Japanese cultured pearls dealt the pearl fisheries a serious blow. Twenty-five years ago there were nearly three thousand dhows engaged in pearling in the Persian Gulf; today there are not more than six hundred. In the twenties the east-coast ports of Saudi Arabia probably sent several hundred boats to the pearl fisheries annually; today there are not more than several dozen. In the twenties the value of the Persian Gulf pearl fisheries was more than a million dollars; today it is less than a quarter of a million.

228 464 Thousands of divers and attendants were thrown out of work. In Kuweit numerous pearlers found employment on sailing ships traveling to India and Africa. On Bahrein Island many were absorbed by the rapidly expanding oil industry. In Saudi Arabia oil development came late, and the unemployed pearlers had already been absorbed as fishermen, rock miners, and farmers; in fact, so well adjusted were the Saudi Arabian towns that when the Arabian American Oil Company needed large amounts of labor in 1945, it had to hire Bedouins from the desert. Oil came late to Kuweit also; however, here workers were drawn from the marine industries, since the Kuweit Oil Company paid higher wages than the workers could get as sailors, pearlers, or fishermen.

Oil has thus been able to offer salvation to the lowly coastal worker of the Persian Gulf. A man in debt can now get a job with an oil company and pay off his debt. So effective has this proved that the Kuweit, Bahrein, and Saudi Arabian nakhodas have difficulty in getting men to send to the pearl fisheries, or to man the sailing ships going to India and Africa. However, oil has yet to come to Oman, so that pearlers still leave the Trucial Coast in large numbers, and many Oman dhows from Sur still sail down to Africa.